coccus. Moreover, it was discovered by investigators that this drug was eliminated almost entirely in the urine, and both in the unchanged as well as in the conjugate form. The conjugate form comprised para-acetylaminobenzenesulfonamid principally, if not entirely.

Because of this heavy elimination in the urine, plus its alleged high chemotherapeutic index for the "coccus" group of organisms, the author began the use of sulfanilamid experimentally some time ago in the treatment of a series of gonorrheal cases, both of acute and chronic nature. All smears (taken from the urethra and centrifugated urine) were proved by the Gram method. To date (May 24, 1937) he has now employed this drug in thirty-eight cases, all seen in private practice and all among male patients. The author realizes that it is a new chemotherapeutic agent whose action is not as yet thoroughly understood. He realizes, also, that thirty-eight cases are far too few from which to draw conclusions. He is aware, also, that all evidence is drawn from clinical observation, and is unsupported by blood and urine analytical checks. While it seems inadmissible under the caption of "Editorial Comment" to present case histories with correlative and substantiative evidence in detail, nevertheless so striking have been the initial results among these thirty-eight preliminary cases treated with sulfanilamid that the author ventures to tabulate certain impressions which must be confirmed or disproved by trial and error in the balance of subsequent clinical and experimental application.

Impressions: (More definite conclusions must await the lapse of time.)

1. We seem about to challenge Philippe Ricord's most famous bon mot and truism—made one hundred years ago—"We know when clap begins, but God alone knows when it ends."

2. For the first time in history the profession has available an effective, formidable and *direct* method of attack for the gonococcus.

3. It is no longer necessary to stand impotently by while "Nature takes her course" to await that aforesaid beatific, curative, but wholly mysterious and autogenetic reaction.

4. Should sulfanilamid fail to "click" at the outset (it was effective in one to three days in 60 per cent of our acute cases), it seems to influence very favorably the clinical course of this malady, both as to the inflammatory reaction and its duration. Moreover, in most instances it appears to prevent altogether posterior extension and complications.

5. The efficacy of sulfanilamid in a given instance poses an individual problem which seems more dependent upon the drug's physiological elaboration or the end point of elimination than upon the chronicity of the gonorrheal process *per se*.

6. Doubtless it will be discovered by later studies, among those patients with no initial "click" or only feeble response, that the metabolistic end point is preponderantly on the conjugate side.

7. The drug does not appear dangerous in moderate doses. Unfavorable reactions in this series comprised, to wit, sixteen instances of slight nausea and indigestion, twelve complaints of dizziness, and one instance of a maculopapular dermatitis. All rapidly disappeared when the drug was withdrawn or the dosage otherwise modified.

8. Much more time, clinical experience and experimental data are necessary exactly to evaluate sulfanilamid in the treatment of gonorrhea.

Medico-Dental Building.

EDWARD W. BEACH,
Sacramento.

CONSERVATISM IN SINUS SURGERY

Fourteen years ago Ross Hall Skillern[1] cautioned us that radical operations on the sinuses do not always spell radical cures, and since then the pendulum in sinus surgery has gradually assumed a midway position. More intelligent planning in the treatment of sinus pathology is being evidenced on all sides. Thus, finally, surgical judgment is beginning to triumph over surgical technique in this particular field. The day is past when we can look upon those deep, irregular and disfiguring depressions in the forehead, following a Killian, as a common occurrence. And we see less and less of those completely exenterated noses, sans turbinates, sans ethmoids, sans smell (paraphrasing Shakespeare) but not, alas, sans odor.

We have learned that a so-called surgically clean nose does not produce a physiologically functioning nose; that the removal of diseased tissue *per se* is not the ultimate goal to be obtained. The prime requisite should be to leave the nose in as normal a condition as possible after the operation in order to avoid unpleasant sequelae which may preclude a completely successful result. And this can best be done by means of the gradual approach.

Given a patient with a proved sinus involvement, the treatment indicated would vary with the particular sinus involved. Suppose that we are dealing with an antral infection: does that automatically mean a radical antrum operation? Not until other and more conservative measures have first been ruled out should an external operation be considered. If the antral washings (by sharp puncture under the inferior turbinate or dull via the natural ostia) consistently produce thick pus or granular pus which mixes with the water, then a window resection should be attempted. For by this procedure, even if a radical should eventually be found necessary, we are now doing part of the later and more extensive operation, and there is, therefore, no duplication of effort. Through the roomy window in the lateral nasal wall sufficient aeration and drainage are achieved, and many an antrum which roentgenologically shows marked cloudiness or thickening of the mucous membrane will clear up without resorting to an external procedure. Of course, in the presence of bone involvement or polyps within the antrum, there is no choice but that of the radical.

[1] Skillern, Ross Hall: The End-Results of Radical Operations on the Accessory Sinuses, Ann. Otol., Rhin., and Laryng. (March), 1923.

Likewise, in the presence of an ethmoid involvement, should we promptly do an external ethmoid exenteration? It is remarkable how many headaches and postnasal discharges clear up merely by uncapping the ethmoid capsule (amputation of anterior third of the middle turbinate), followed by appropriately medicated tampons intranasally placed, and infra-red heat externally. Zinc ionization[2] in selected cases has proved of inestimable value. These methods have served to localize the infection in the cells of the ethmoid labyrinth to the area actually involved, and also to promote drainage to a dependent level rather than spread the infection up toward healthy cells by an indiscriminate curetting of all the cells in sight. Not a few patients in the past have started out with an involvement of the anterior ethmoids and, through no fault of their own, have ended up with a posterior ethmoiditis. Small wonder, then, that the laity shudders, when a sinus operation is suggested, with the remark, "Once a sinus operation, always a sinus operation."

In the presence of such positive indications as retrobulbar neuritis, fistulae, orbital involvement or other grave complications, where the ethmoid is known to be at fault, there is, of course, no question but that an external ethmoid should be done and that at once. It is only in those ethmoid sinus involvements producing such symptoms as headache, a postnasal discharge and the like, that I present my thesis that the more conservative measures be tried initially and, if proved inefficient, then the more radical procedures may be carried out.

The same principles would govern the management of a frontal sinusitis. Amputation of the anterior third of the middle turbinate uncovers the nasofrontal duct and drainage, in this instance being naturally dependent, produces results in a relatively short period of time. Occasionally, however, the external operation must be resorted to, but modifications in technique prevent any noticeable external deformity.

The sphenoid sinus lends itself very easily to irrigations or an enlargement of its natural ostium, and usually that is all that is required. Curettage within the sinus is dangerous due to occasional dehiscences in its walls, and because of its proximity to important nerves and vessels.

The modern rhinologist has learned to consider sinus pathology as a local manifestation of a general condition and bases his treatment on this assumption. Hurd[3] agrees that much of the discredit on the results of sinus operations in the past has been due to lack of understanding of the underlying causes. Allergic patients will never be cured, and very little relieved by the most extensive operation, if the sensitizing agent is not found and removed. Shurly[4] articulates our thoughts by stating that many of our surgical problems are developed as a result of lymphoid or bony overgrowth and resultant obstruction. Why are the nasal passages, with their importance in the preservation of health, so frequently deformed and hypertrophied? If we may enter the field of preventive otolaryngology with the same scientific zeal attained in preventive medicine in general, we are aware that the future realm of scientific value to humanity is not in surgery, medicine, or otolaryngology, but in research study directed along the lines of biochemistry, that will solve the problems of infection, immunization, the rôle of the endocrines, and the chemistry of foods. The untold prophylactic value of scientific feeding, the maintenance of an endocrine balance, the study of vitamin supply, and the influence of light and outdoor life are subjects worthy of consideration in the problems of the restoration of a better osseous development.

516 Sutter Street.

SIDNEY H. GIDOLL,
San Francisco.

2 Gidoll, Sidney H.: Zinc Ionization in the Treatment of Nasal Sinusitis, Calif. and West. Med., 40:187, 1934.

3 Hurd, Lee M.: Chronic Infections of the Nasal Accessory Sinuses, Ann. Otol., Rhin., and Laryng., 39:966 (Dec.), 1930.

4 Shurly, Burt R.: Deficiency Diet in Relation to the Skeleton, Especially in Connection with the Bone Infections of the Head, Ann. Otol., Rhin., and Laryng., 38:612 (Sept.), 1929.

EARLY DIAGNOSIS OF CANCER

Just of what value is the early diagnosis of cancer? To the surgeon an early diagnosis means the recognition of cancer while yet localized so that, if completely removed in a manner that would not spread it at the time either locally, through lymphatic channels or the blood stream, it would be cured. This surgical evaluation is very old now, and all these years the public has been taught to seek advice with the first gleam of suspicion.

The use lately of means of treatment other than surgery has changed the meaning of an early diagnosis in the foregoing sense. Irradiation has replaced surgery altogether in some forms of cancer and, in these conditions, an early diagnosis is not so essential as it is if surgery is to be used. Cure by surgery is effected only with complete removal, which is impossible after metastases occur. Nevertheless, with the exception of a few radiocurable cancers, the mortality of cancer remains about as high as ever. The success with irradiation in these few radiocurable forms has lowered the efficiency in the treatment of the many radioresistant forms of cancer. An early diagnosis is made no more frequently today than formerly and, when made, is not acted on so promptly as before the days of irradiation. These two factors alone explain many failures in the treatment of cancer. Until the cause of and a specific cure for cancer are found, the profession should hold fast to the slogan, Early diagnosis and prompt surgery will cure cancer.

384 Post Street.

FRANK HINMAN,
San Francisco.

The inventors of the alphabet could not have foreseen the odd uses to which their signs and symbols would some day be put: How a man might read to take his mind off a mortgage, to make a journey seem shorter, to kill ennui, to rest the mind after an emotional storm, or to lull himself to sleep at night. If you would develop powers, read not often merely to pass the time, for listless reading breeds a poor memory.